



Power Amplifier

Model: PA-0G5-3G-100

0.5-3GHz 100W CW

Ultrabroad frequency range, high performance and exceptional RF characteristics

Features:

- Frequency range: 0.5-3GHz
- High output power at saturation, 100W Typ.
- High gain, 50 dB Min.
- 50 Ohm Matched Input / Output.

Applications:

- Cellular
- PCN
- GSM
- ISM
- Lab Test

Product Overview:

The PA-0G5-3G-100 is a power amplifier with a minimum gain of 50 dB and a nominal Psat of 100W across the frequency range of 0.5 to 3 GHz. The DC power requirement for the amplifier is +32 VDC/10 A. The input and output port configuration offers coax adapter structure with SMA female. And it has built-in protection functions included over TEM protection.



Electrical Specifications at 25°C:

Parameter	Min	Typ	Max	Units
Frequency range	0.5		3	GHz
Gain	50			dB
Gain Flatness			3±1	dB
Input Power			3±1	dBm
Output Psat*		100±1		W
Spurious			-65	dBc
Harmonics@Pout=100W			-10	dBc
Input VSWR			2	:1
DC Voltage		32		V DC
DC Supply Current		10	13.5	A
Impedance		50		Ohms

Note: The output power is more than 93W at 3GHz.

Mechanical Specifications:

Parameter	Value	Notes
Operating Temperature*	-20°C to +50°C	
Non-operating Temperature*	-30°C to +60°C	
Relative humidity	95	%
RF Input/Output Connector	SMA Female/SMA Female	
DC Supply Connector	5569-4.2mm 2*3 Female	
Power amplifier PTT switch port	The power amplifier is set to be off by default, while +3.3 to +5V is enabled.	
Altitude	10,000	feet
Shock / Vibration(MIL-STD-810F)	25g rms (15 degree 2KHz) endurance, 1 hour per axis	
Shock(non operating)	20G for 11msc half sin wave,3 axis both directions	
Dimensions W x H x D	238*128*25.3	mm
Weight	≤2	Kg

*Note: For a wider temperature range, please consult the manufacturer.



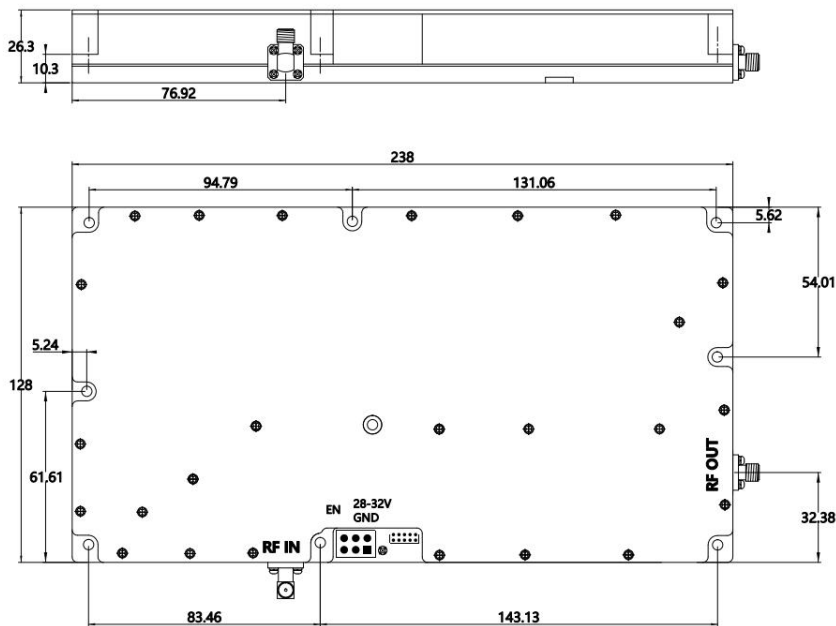
Absolute Maximum Ratings:

Parameter	Value
Supply Bias Voltage	+33 V
RF Input Power	+6 dBm
ESD sensitivity (HBm)	Class 0, passed 150V

Outline Drawing:

Unit:mm

PA-0G5-3G-100



Key Features:

Parameter	Advantages
Protection functions	Over TEM: $\geq+80^{\circ}\text{C}$ shutdown

Ordering Information:

Base Number	Description	Optional
PA-0G5-3G-100	Power Amplifier, 0.5-3GHz, Gain:50dB,Psat:100W,+32V DC	Without Heatsink
PA-0G5-3G-100-HS	Power Amplifier, 0.5-3GHz, Gain:50dB,Psat:100W,+32V DC	With Heatsink